



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/721,441	11/22/2000	Steve Beck	291508005US1	2327

25096 7590 08/11/2005

PERKINS COIE LLP  
 PATENT-SEA  
 P.O. BOX 1247  
 SEATTLE, WA 98111-1247

EXAMINER

CARLSON, JEFFREY D

ART UNIT	PAPER NUMBER
----------	--------------

3622

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

---

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**MAILED**

AUG 11 2005

**GROUP 3600**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/721,441  
Filing Date: November 22, 2000  
Appellant(s): BECK ET AL.

---

Steven D. Lawrenz  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 5/24/05.

A handwritten signature, possibly "R", is located in the bottom right corner of the page.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Claimed Subject Matter***

The summary of claimed subject matter contained in the brief is correct.

**(6) *Grounds of Rejection to be Reviewed upon Appeal***

The appellant's statement of the grounds of rejection to be reviewed upon appeal in the brief is substantially correct. The changes are as follows: Applicant incorrectly labeled claim 1 as being rejection under 35 U.S.C. ¶ 101, however it is claim 15 that was given such a rejection..

Art Unit: 3622

**(7) Claims Appealed**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Prior Art of Record**

6,654,725	Langheinrich et al	11-2003
6,470,079	Benson	10-2002
6,134,532	Lazarus et al	10-2000

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claim 15 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 15 attempts to set forth a data structure claim, but merely sets forth a collection of data elements which are taken to be non-functional descriptive material and therefore provide only a mere arrangement of data.

See MPEP 2106 IV B 1:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of **data structures** and computer programs which impart functionality when employed as a computer component. **(The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions."** The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

...  
When nonfunctional descriptive material is recorded on some computer-readable medium, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make it statutory.

The following clarifies what the examiner believes the claim positively defines: The data identifying a user's test group is set forth. The language describing *how* the user was assigned to the test group does not further define the data identifying a user's test

Art Unit: 3622

group, nor does mentioning what might be possible to accomplish having such data.

Unless applicant claims computer programming that accomplishes the selection and usage of the data to select an ad, the claim merely sets forth data identifying users' test groupings. As written, the language regarding conditions to be applied appears to set forth intended use. The claim paragraph regarding the subgroups is similarly analyzed. As such, claim 15 sets forth the following data elements: a user's test group, a user's subgroup. If the suggested changes were made, the data elements of sequences of conditions would also be positively part of claim 15. That being said, the claim would still lack "data structure" which imparts functionality when employed as a computer component and would still merely be a collection of data elements comprising non-functional descriptive material. There is no data structure in the claim and applicant's *desire* for the conditions to be applied does not provide any structure or relationship among data elements designed to support specific data manipulation functions.

Examiner believes that in general, examples of a data structure's "relationship among data elements designed to support specific data manipulation functions" can be object-oriented structures, a hierarchy of folders, pointers to data, etc., that help the processor find and use the stored, interrelated data elements. See *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory).

Claims 15, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langheinrich et al (US6654725) in view of Benson (US6470079).

Regarding claims 15, 30, Langheinrich et al teaches prior techniques of allowing advertisers to specify targeting constraints that limit the display of an advertisement banner to certain conditions. The system checks the conditions and filters out all non-applicable ads for the current browser ad request/opportunity. An ad is then chosen randomly from the pool of remaining applicable ads. The conditions may include conditions such as: type and version of browser, OS, originating site, country, time of day, day of week [1:33-46]. Langheinrich et al states that filtering techniques allow for very precise targeting [2:26-30] and it would have been obvious to one of ordinary skill at the time of the invention to have provided an ad campaign with a series of such disclosed conditions to be checked to enable constraining of the available ads to a few highly targeted, applicable ads in order to provide the precise targeting for a variety of parameters. Such a campaign essentially provides a single group (such as the left half of applicant's quite helpful figure 5) whereby each of the plural sequence of conditions (time of day, day of week) is tested and satisfied conditions trigger display of an ad selected randomly from a subset of ads suitable for the satisfied condition (randomly select one of several ads suitable for Saturday ad requests). The random selection of a subset ad represents selecting a subgroup for the user for which that ad is designated. The random selection from among the applicable ads provides random selection of "subgroups" in the same manner as applicant's system and results in the "treatment" of the display of the randomly selected ad for that subgroup. Langheinrich et al does not

teach more than one simultaneous campaign/group (as stated above, Langheinrich teaches only the left half, for example, of fig 5). Benson teaches the idea of running simultaneous advertising campaigns to which users are exposed. The results and effectiveness of the simultaneous campaigns can then compared to each other to determine the best campaign [1:28-45, 5:19-28, 13:45-57]. It would have been obvious to one of ordinary skill at the time of the invention to have provided multiple simultaneous filtering campaigns (each with their own sequences of conditions and randomly selected ad treatments) so that the best filtering campaign/approach can be measured and identified. This would provide the left side of applicant's figure 5 as well as the right side. It would have been obvious to one of ordinary skill at the time of the invention to have randomly assigned web visitors having ad requests/opportunities to each of the plural campaigns (groups/sides-of-fig-5) so that each campaign/group may be simultaneously tested in a scientific manner. The random assignment of users to each simultaneous campaign (group/side) would necessarily require providing information identifying a test group to which a user belongs in order to trigger the proper sequence of condition testing for each user. Although not believed to be a positive limitation in claim 15, the manner in which a user is assigned to a campaign (group) is done randomly to scientifically test the available campaigns and is not based on the user profile. Regarding the assignment of users to a subgroup, the random selection of filtered ads as taught by Langheinrich et al provides such a feature without a basis in the user profile. It would have been obvious to one of ordinary skill at the time of the invention to have performed the random assignment of the user to each subgroup

Art Unit: 3622

(random selection among filtered, applicable ad subgroups) before or after each condition is tested, as a matter of design choice.

Regarding claim 31, Langheinrich et al teaches that the system can keep track of the effectiveness for each ad. The system can then select to show the most effective ad in the subgroup of applicable ads [1:64 to 2:3]. Benson teaches that the effectiveness for each group of conditions (each campaign) can be measured and then compared against the other campaigns in the aggregate [13:45+]. It would have been obvious to one of ordinary skill at the time of the invention to have done such an analysis so that the most effective filtering campaign can be chosen and carried out further.



Claims 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langheinrich et al (US6654725) in view of Benson (US6470079) and Lazarus et al (US6134532).

Regarding claim 32, Lazarus et al teaches targeted advertisement selection and in particular teaches tracking activity of identified users via a dynamic profile and using that profile information to select a targeted ad. It would have been obvious to one of ordinary skill at the time of the invention to have provided such user identification and behavior tracking in a profile that is used as a basis for the condition testing of Langheinrich et al in order to select a more effectively targeted ad. The proposed combination of teachings of Langheinrich et al and Benson provide motivation for group and subgroup selection without regard to any user profile. While assignment to the selected group and subgroup using the user identifier is taken to be met merely by an identified user being treated with the chosen group and chosen subgroup, it would have been obvious to one of ordinary skill at the time of the invention to have identified a user having an ad opportunity and assigned the user to the selected group and subgroup using that identifier so that ad effectiveness and targeting effectiveness can be tracked, especially with regard to each user and user type/profile.

Regarding claim 33, Langheinrich et al teaches that the system can keep track of the effectiveness for each ad. The system can then select to show the most effective ad in the subgroup of applicable ads [1:64 to 2:3]. Benson teaches that the effectiveness for each group of conditions (each campaign) can be measured and then compared against the other campaigns in the aggregate [13:45+]. It would have been

Art Unit: 3622

obvious to one of ordinary skill at the time of the invention to have done such an analysis so that the most effective filtering campaign can be chosen and carried out further.

Regarding claim 34, programming the system to make the random assignment of users to the groups and subgroups inherently “tends to conform the relative sizes” of the groups and subgroups to predetermined sizes if the assignments are truly randomly performed.

Applicant argues that that none teach the test groups. This is provided by the combination of Langheinrich and Benson suggested above whereby two campaigns are run simultaneously and tested against each other.

Applicant argues that that none teach information identifying a group to which a user belongs. As suggested above, the users are randomly assigned to either of the two simultaneously running campaigns (or groups).

#### **(10) Response to Argument**

Applicant argues that claim 15 sets forth data structure and is therefore statutory. While the claim preamble and applicant’s arguments attempt to label the data claimed as data structure, the examiner does not consider the claimed data expressing what group a user belongs to (i.e. Jeff is in group A, subgroup B; Steve is in group A, subgroup B) to be a data “structure”, but rather a mere collection or arrangement of data. As explained above, the claim language regarding how the data came to be (how users were assigned to groupings) or what might be possible to accomplish having such

Art Unit: 3622

data does positively limit the claim scope – the claim scope remains as simply data describing to what group a user belongs. As described earlier and above, examiner believes that in general, examples of a data structure's "relationship among data elements designed to support specific data manipulation functions" can be object-oriented structures, a hierarchy of folders, pointers to data, etc., that help the processor find and use the stored, interrelated data elements. See *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory).

Applicant further argues that the data can be used by the system to provide functionality and is therefore statutory. Examiner disagrees. The claim simply sets forth the grouping data and not any positive system structure which is capable of: 1) determining the grouping assignments, nor 2) using the groupings to apply conditions. Applicant should include computer programming capable of accomplishing such steps if applicant wants to claim more than simply the grouping data.

Applicant argues that examiner is using disclosure from the background section of Langheinrich. This is believed to be permissible as it is published disclosure before applicant's filing date.

Applicant argues that none teach a first satisfied condition. The conditions are applied sequentially and any TRUE condition would trigger a random subgroup ad; this would occur for the first TRUE condition.

Applicant argues that that none teach selection of conditions based on group (claim 15) or upon random selection (claim 30). First, as stated above claim 15 does not

Art Unit: 3622

positively set forth any limitation regarding how groups are assigned or what conditions to test. Nonetheless, the rejection sets forth random selection of an ad campaign (a group, a "side" of fig 5) which meets the claim language.

Applicant argues that none teach grouping. Assigning which campaign to apply provides grouping. All users who experienced campaign A (such as the Left side of fig 5) can be said to be grouped and treated the same based on the grouping.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Jeffrey D. Carlson  
Primary Examiner  
Art Unit 3622



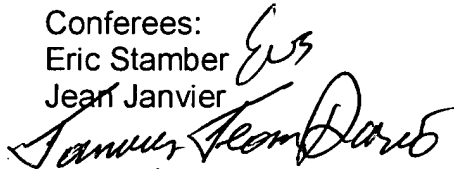
jdc

August 5, 2005

Conferees:

Eric Stamber

Jean Janvier



PERKINS COIE LLP  
PATENT-SEA  
P.O. BOX 1247  
SEATTLE, WA 98111-1247